

officers of the Iron and Steel Division were: F. M. Becket, *chairman*; W. J. MacKenzie, *past chairman*; C. B. Murray, W. E. Ruder and F. N. Speller, *vice-chairmen*, and A. B. Kinzel, *secretary*. The program committee of this division consisted of C. E. Meissner, *chairman*, Walter Crafts, G. B. Waterhouse and Clyde E. Williams.

Members of the American Institute of Mining and Metallurgical Engineers registered outside the Georgian Room of the Hotel Statler on Monday morning. Starting on Tuesday morning there were six technical sessions, for which there were 23 important papers. On Thursday afternoon Dr. P. W. Bridgman, Hollis professor of mathematics and natural philosophy at Harvard University, presented the science lecture. His subject was "Recently Discovered Complexities in the Properties of Simple Substances." On Friday afternoon R. J. Cowan presented a paper on "The Development of Continuous Gas Carburizing," at a joint session of the American Society for Steel Treating and the Iron and Steel Division, at which the principal topic was nitriding and carburizing.

The Society of Automotive Engineers cooperated with other engineering societies by having a technical session at the National Metal Congress in connection with an exhibition. Technical sessions were held in the Georgian Room of the Hotel Statler on Wednesday morning, September 23. F. P. Gilligan, chairman of the Iron and Steel Division of the standards committee, presided. He had been active for many years in the society's work and is a past president of the American Society for Steel Treating.

The program of the session comprised three timely papers on important subjects, two of which dealt with the methods and costs of heat treating and made available valuable information bearing more on the economics of the subject than on its purely metallurgical phases. One of these two papers was presented by E. F. Davis, the metallurgist of the Warner Gear Company, and the other by Dr. Haakon Styri, of SKF Industries, Inc. The third paper at the sessions, which was read by F. W. Shipley, foundry metallurgist of the Caterpillar Tractor Company, was devoted to the metallurgical characteristics and advantages of alloyed cast irons, particularly for use in cylinder castings. The number of papers given at this session was limited by the society so that each might be presented in full and ample time allowed for general discussion.

The American Welding Society offered a technical program for their sessions at the congress. All their sessions were held at the Copley Plaza Hotel.

#### CLINICAL CONGRESS OF THE CONNECTICUT STATE MEDICAL SOCIETY

THREE hundred physicians were expected to attend the seventh annual Clinical Congress of the Con-

necticut State Medical Society, which was held at New Haven from September 22 to 24. Dr. Creighton Barker was chairman of the committee on enrolment. Equal emphasis and time were given this year to demonstrations and lectures, according to Dr. Barker. In general, morning meetings were devoted to presentation of papers and afternoon meetings to demonstrations of the subjects treated in the papers. All morning and afternoon sessions were concentrated at the Yale School of Medicine for the first time in the history of the congress, and this proved to be a time-saver and convenience to those in attendance.

Of unusual interest was an address on infantile paralysis by Dr. William H. Park, of the New York City Department of Health. This paper, in which Dr. Park discussed findings in regard to the prevalence and spread of this disease and measures to be employed in controlling it, was given on Wednesday, at which time diphtheria control also was discussed by Dr. Park and by others, including Dr. Stanley H. Osborn, state commissioner of health of Connecticut, Dr. John L. Rice, health officer of New Haven, and Dr. William F. Wild, health officer of Bridgeport.

General interest centered on an address to be given by Dr. Linsly R. Williams, director of the New York Academy of Medicine, on the subject, "Is Medical Service a Necessity?" This address was given at a dinner meeting held on Tuesday evening at the New Haven Lawn Club, with Dr. Charles C. Gildersleeve, of Norwich, president of the State Medical Society, presiding.

The following papers were presented on Tuesday: "Medicinal Foods," by E. Monroe Bailey, chemist; "Tumors of the Large Bowel," by Dr. Daniel F. Jones, and "Functional Gastro-Intestinal Disturbances," by Dr. Thomas R. Brown. In the afternoon group discussions of these papers were led by Dr. Brown, Dr. Eugen Kahn, Dr. Jones and Dr. Joseph I. Linde, after which the following demonstrations were given: Medicinal foods, Dr. Bailey; gastric pouch experiments, Dr. George R. Cowgill; vitamin deficiencies, Dr. Lafayette B. Mendel; pathological lesions, Dr. Samuel C. Harvey and staff, and Dr. Raymond G. Hussey and staff; gastro-intestinal studies, Dr. William A. LaField and staff; test meal, Dr. Albert J. Sullivan; dental pathology, Dr. Bert G. Anderson; hypodermoclysis, Dr. Grover F. Powers and staff; congenital anomalies of the digestive tract, Dr. Ethel C. Dunham; carcinoma of the stomach, Dr. Ashley W. Oughterson. The dinner meeting, addressed by Dr. Williams, began at seven o'clock.

Papers given on Wednesday morning include: "Fractures of the Lower Extremity," by Dr. Philip Wilson; "Fractures of the Upper Extremity," by Dr. Clay R. Murray; "The Control of Diphtheria by Bacteriological and Immunological Methods," by Dr.

Park; "Epidemiological Studies of Diphtheria Control," by Dr. Edward S. Godfrey; "Diphtheria in Connecticut," by Dr. Osborn; "Results in Bridgeport," by Dr. Wild; "Results in New Haven," by Dr. Rice.

In the afternoon a clinical pathological conference was led by Dr. Francis G. Blake and staff, and a round table discussion by Dr. C.-E. A. Winslow and staff. The dinner meeting at the New Haven Lawn Club was addressed by Dr. Theodore T. Zuck, of Cleveland, on "Maternal Health in Relation to Race Betterment."

Marital maladjustments were discussed on Thursday morning by Dr. William B. Terhune, of the Austen Riggs Foundation, and tuberculosis and pregnancy by Dr. David R. Lyman, director of the Gaylord Farm Sanatorium. An illustrated lecture on sterility studies was given by Dr. William H. Cary, of New York City. Dr. Robert L. Dickinson, secretary of the National Committee on Maternal Health, gave a talk on "Seven Years' Research in Contraceptive Methods." The congress concluded on Thursday afternoon with a group discussion of sexual adjustment in marriage, led by Dr. Josephine H. Kenyon, and a discussion of sterility, led by Dr. Cary.

#### THE BRITISH INDUSTRIAL HEALTH RESEARCH BOARD

THE eleventh annual report of the British Industrial Health Research Board has been published. According to a summary in the *London Times* it includes an analysis of the work published during the years 1926-30, and covers the whole field of industry.

It is claimed that real progress has been made in ascertaining the nature of some of the principal factors affecting human health and efficiency in industry. For example, the study of industrial fatigue in heavy work has now reached a stage which, in the opinion of the board, shows conclusively the fallacies of long hours and the benefits of suitable environmental conditions and of scientifically imposed rest pauses. The fatigue with which the board is now more concerned is the mental state produced by hours of monotonous work in an industrial world of progressively mechanized production, and in this connection close analysis of the various influences operating on

those engaged in uniformly repetitive work has thrown fresh light on their reactions to it, as reflected by variations in output, speed and accuracy, and as expressed by symptoms of boredom shown by the workers themselves. Conclusions have been reached as to the way in which these conditions can be relieved by varying work and introducing rest pauses.

The report continues:

In a more special sphere the practical value to workers engaged in fine work of using suitable spectacles was demonstrated—the particular new point here being the benefit to be derived from these spectacles by persons possessing normal vision. From the mental side, study of the incidence of nervous symptoms has served to remind those with managerial responsibility of the prevalence of workers who are temperamental misfits in their employment—and not all of them in subordinate positions.

With the exception of the last, the instances mentioned are illustrative of advances in knowledge concerning the effects of the factors studied on workers regarded more as groups than as individuals. Reference, however, must be made to those studies dealing with the individual in relation to his occupation which are generally spoken of as vocational, and on which much of the work of the board bears. On the general aspect of these problems, research for the board is still confined to fundamental investigations of personal qualities in their relation to occupational training and success. The subject is vast and intricate, and though the board is convinced that as a result of these investigations improved methods of selection will eventually be devised, they are still at the stage of defining their terms. In one branch of this subject—the detection of the "accident prone" worker—information seems to have been obtained which should be capable of practical application at no distant date. Apart from this general question of testing for personal qualities, there are particular vocational questions which have been studied but about which also insufficient knowledge has as yet been gained to afford grounds for conclusions capable of practical application. Among these may be instanced the occupational fitness of mental defectives, and the preliminary study, already referred to, of those whose temperaments render them liable to nervous symptoms affecting their vocational fitness. It is in such types that are likely to be found the most noticeable reactions to various disturbing conditions of environment, such as noise, which are now being investigated.

## SCIENTIFIC NOTES AND NEWS

DR. DAVID STARR JORDAN, chancellor emeritus of Stanford University and eminent ichthyologist, died on September 19 at the age of eighty years.

THE Grasselli Medal will be presented to Dr. L. V. Redman at a joint meeting of the Society of Chemical Industry with the New York section of the Amer-

ican Chemical Society, American Electrochemical Society and Société de Chimie Industrielle on November 6. The award has been made for his paper entitled "Cost of Research and its Apportionment," which was presented at a meeting of these societies on December 9, 1927.